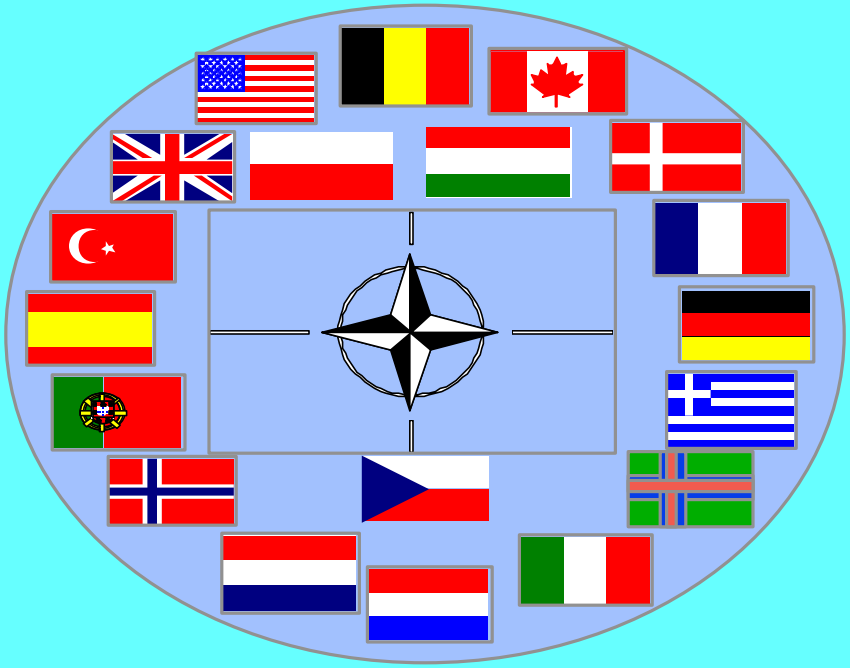
MINISTRY OF NATIONAL DEFENCE
BUREAU OF MILITARY STANDARDISATION SERVICE

QUALITY ASSURANCE PROGRAM



The third Annual Host Nation CAS Conference AFR Chiemsee, Bernau Feldon

14 - 16 JUN 2000

Status of Polish preparation for reciprocal GQA

Quality Assurance Division
LTC Wieslaw KLIMCZAK
Maj Bogdan KOWNACKI

Presentation content:

❶ **Organisational Structure**

❷ **The goal of Quality Assurance Division**

❸ **How our Quality System was established and used to operate**

❹ **Stages of risk based approach**

❺ **Quality Control (past)**

❻ **Quality Surveillance**

❼ **Quality Assurance Program**

❽ **Training System**

❾ **Plans for future**

❿ **Final Remarks**

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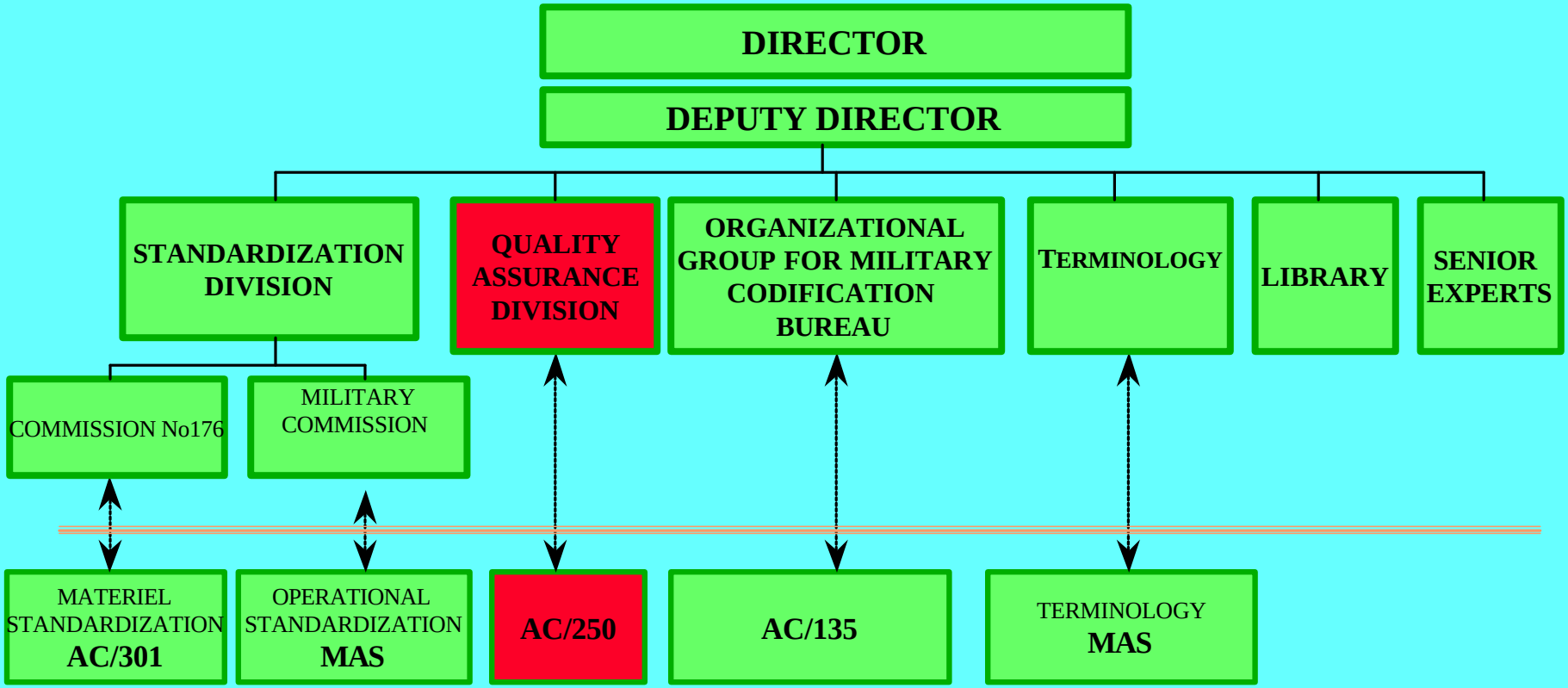
STRUCTURE OF THE BUREAU



NATO

The hottest

TERMS OF REFERENCE

1) STANDARDISATION

•OPERATIONAL

•MATERIAL

2) **QUALITY ASSURANCE**

- **QUALITY CONTRACTING**
  - **•EVALUATION OF QUALITY SYSTEMS**
  - **•QUALITY SURVEILLANCE**
  - **•TESTING AND CERTIFICATION OF DEFENSE PRODUCTS**
  - **•TRAINING**

3) CODIFICATION OF DEFENSE PRODUCTS

4) MILITARY TERMINOLOGY

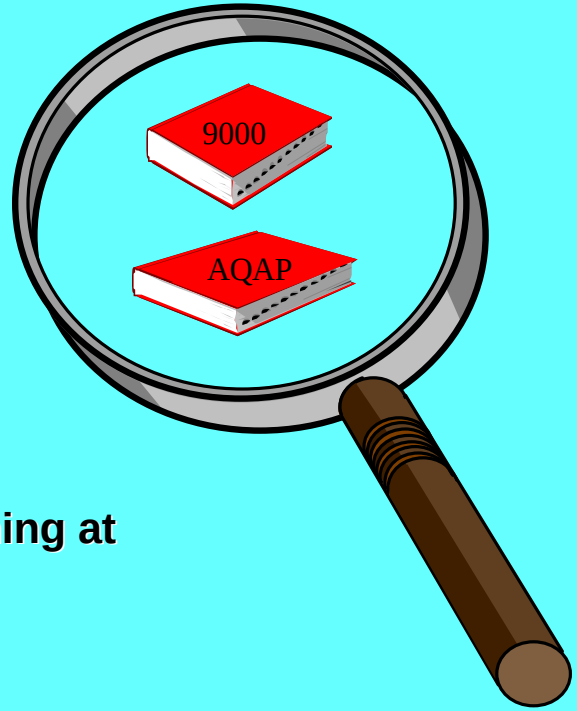
5) INTERNATIONAL COOPERATION IN ALL IN ALL OF THE FIELDS MENTIONED

The goals in the QA area

- **Prepare quality system to operate in compliance with STANAG 4107**

- **Prepare our organisation for establishing reciprocal GQA agreement**

- **Establish the system in MoD, which is continuously aiming at through live QM**



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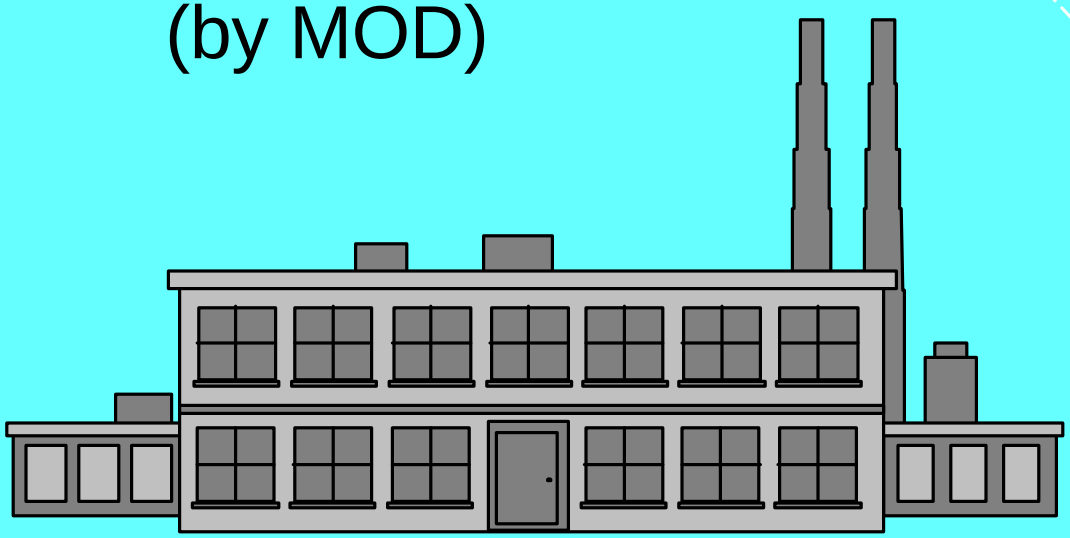
What we had before 1995?

Quality Control
(by MOD)

800
Inspectors



KTW, 25 Laboratories and 12 certification bodies
Disadvantages - informal responsibility

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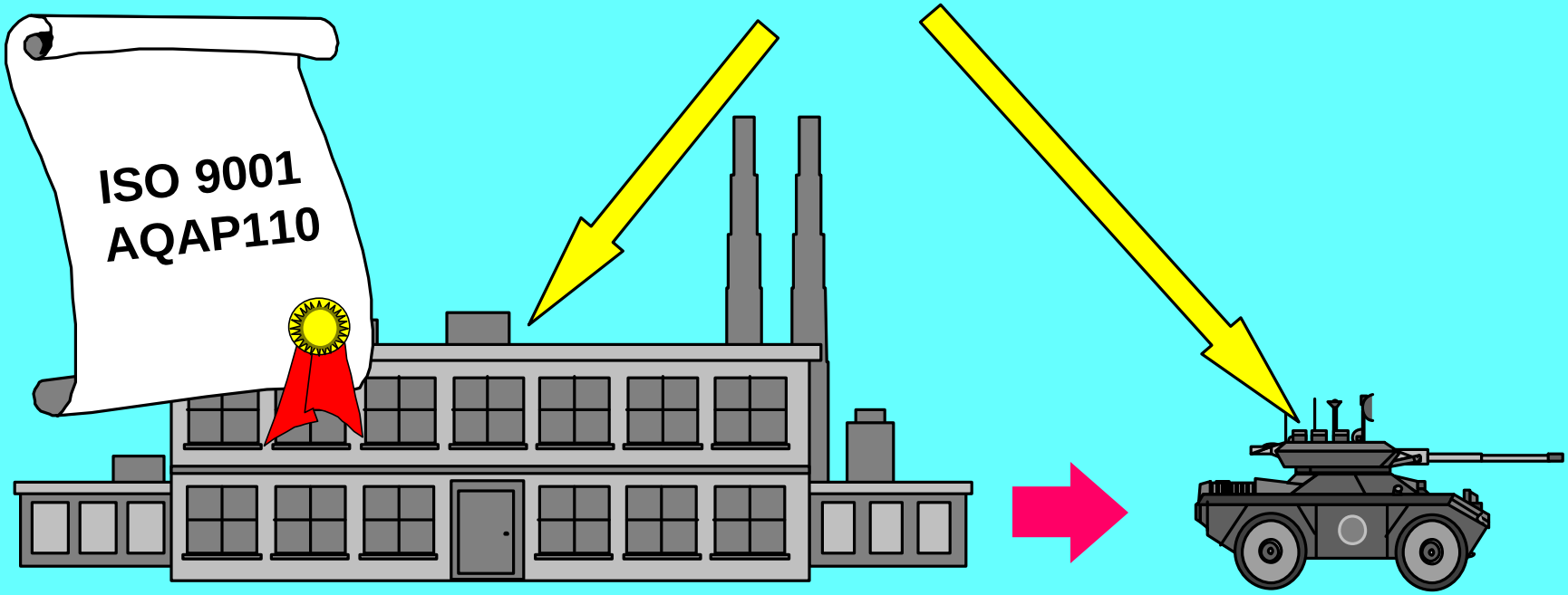
Contractor Responsibility

Starting cooperation may 1997

we have learnt new quality ideas

QUALITY



Number of certified companies in total about 1000

Have changed industry`s (major prime contractors) way of thinking, now they have quality awareness

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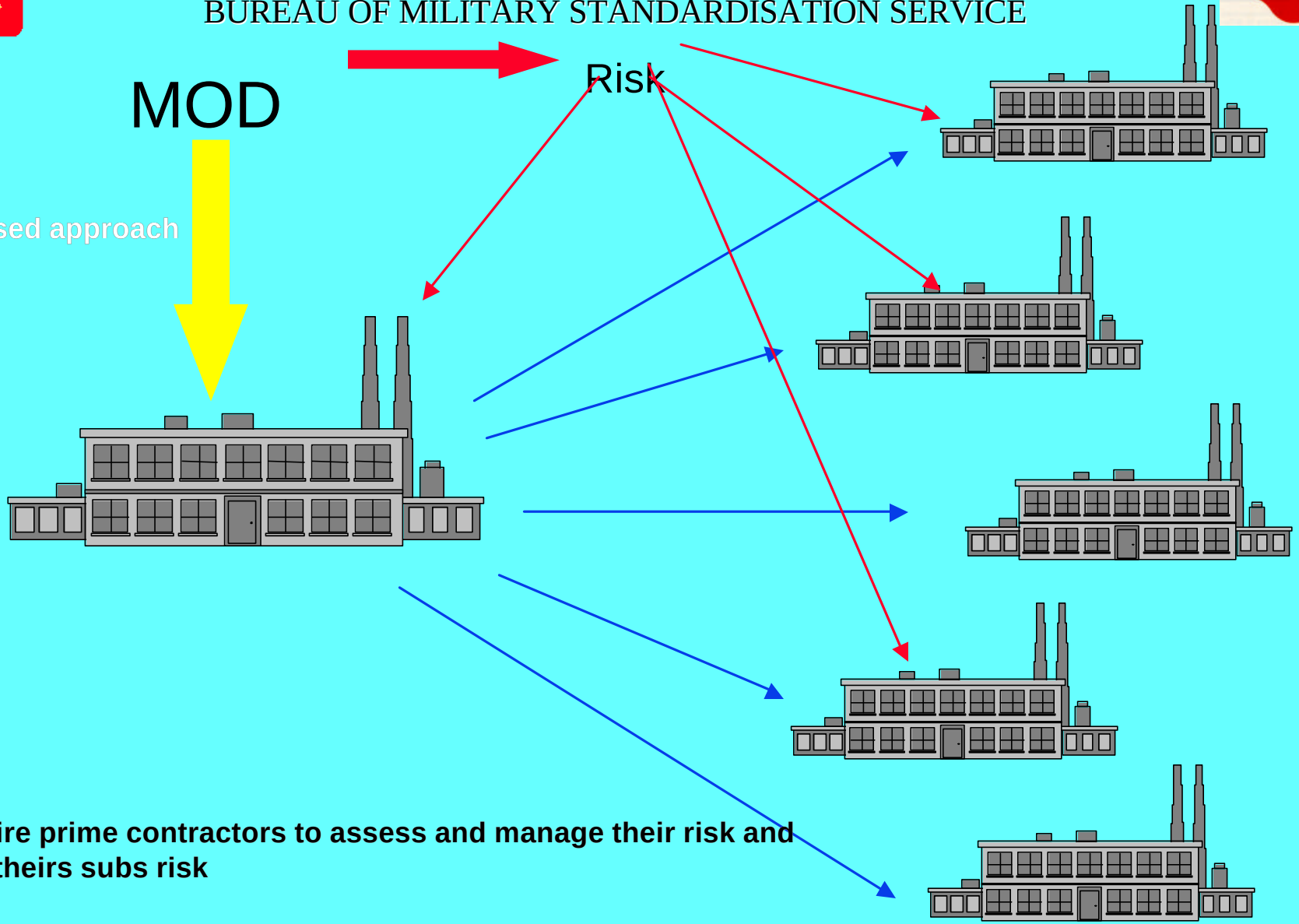
MOD

Risk

Risk based approach



We require prime contractors to assess and manage their risk and assess theirs subs risk

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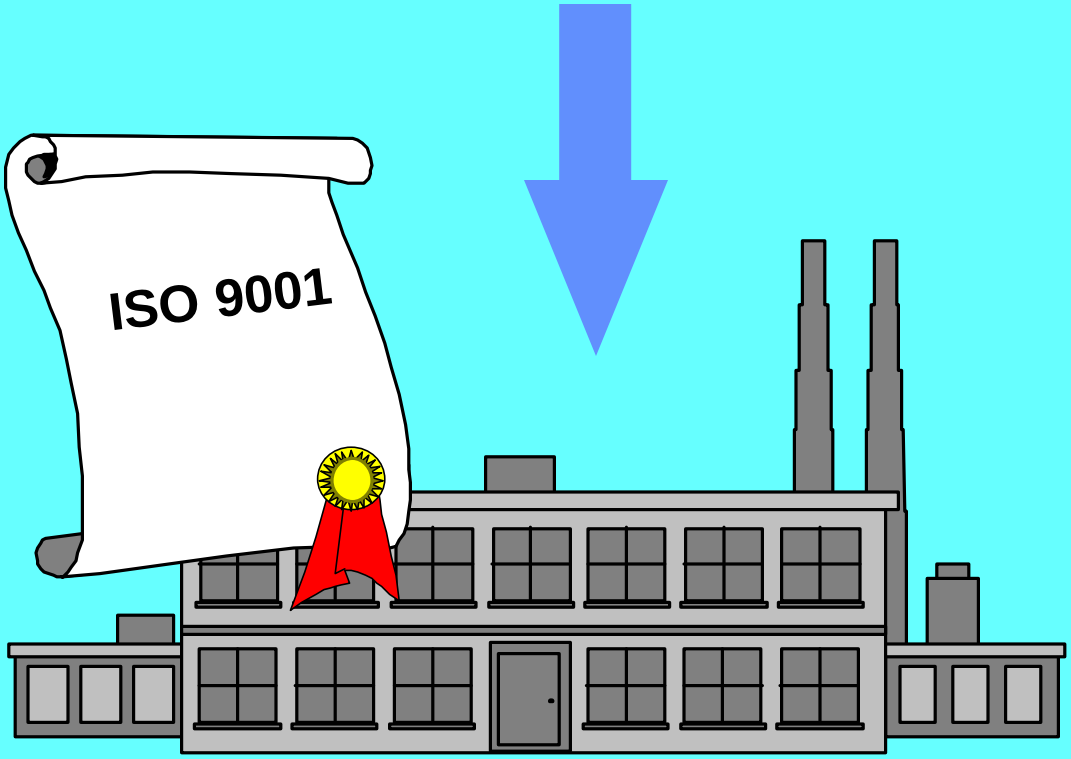
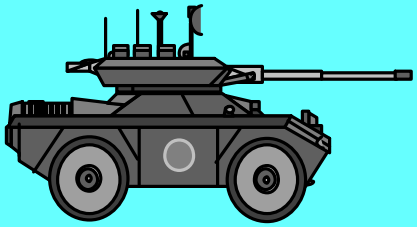
QAR's

Risk based surveillance

The goal for Year 2000

Move from QC to Quality Assurance





Increase of quality systems implemented in industry

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LOCATION OF GQR AGENCIES

15 locations. Agencies employ necessary expert and operate in the appointed area. The territory is covered

This is the first stage of our concept aiming to reorganise quality surveillance system from inspection to based on risk.

Quality Surveillance vice Inspection (it was not achievable without QS implemented in industry)

Selective surveillance based on risk: advantages of this approach (effectiveness, and economicalness)

Not going to implement NAC-NOC policy, now we have to certify

Awareness about snap-shot

This would cover only two life cycle phases development and production.

Mission: to prepare quality personnel at all levels for this task (Q surv. based on risk), including industry

How we are doing it

Partnership with industry training

Trust and mutual respect.

Involvement of top Mgt. and awareness of staff

Teamwork with Internal Stakeholders (Acquirer, User)

Awareness that quality is everybody's business

Judicious use of Public Resources

Deliver a consistent National QA Program

We are not going to downsize the organization, but expand the scope of operation capability to adopt to others departments.

This is plan for future

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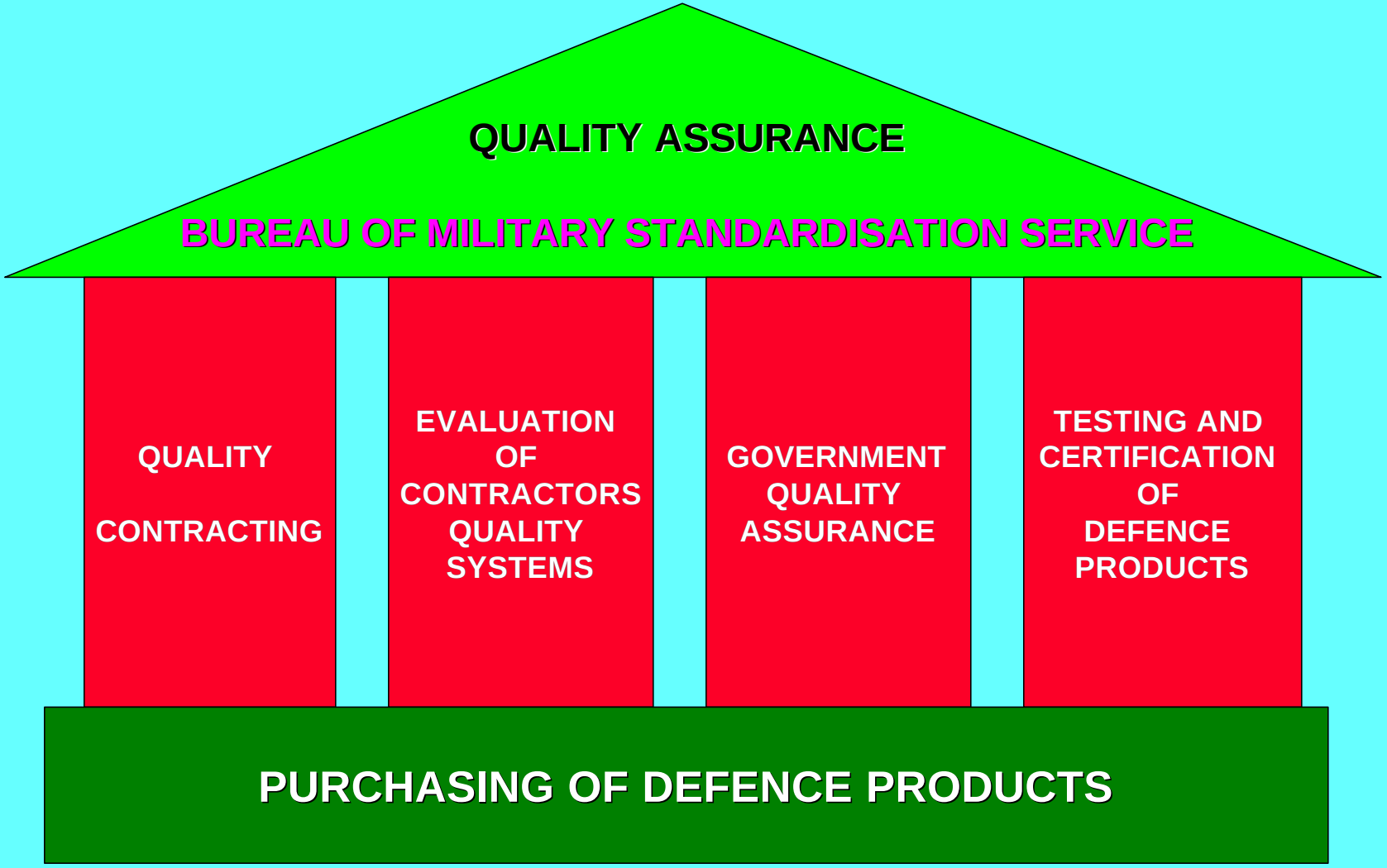
QUALITY ASSURANCE PROGRAM



QUALITY CONTRACTING

- **To improve the quality of contractual documentation**
- **To select the appropriate quality system requirements and to participate in the bid evaluation process**

QUALITY SYSTEM EVALUATION

- **To assist in establishing or determining the status of a supplier's quality system**
- **To encourage continuous improvement**

We think about new ISO and new AQAP , where it is a req

- **To provide the basis for risk assessment**

We achieve data this way

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Accreditation Certificate
no. 57/Cs – 68/1/99

issued by the Polish Centre for
Testing and Certification
to certify that
Quality Assurance Section
of the Bureau of Military
Standardisation Service
have fulfilled all requirements to
become

Quality Systems Certification Body

Examples of companies
Audit by EOQ

QUALITY SURVEILLANCE

- **To provide confidence that the product or service will conform to the contract. This may also include any or all of the services offered under the Engineering, Technical and Logistics services description**

In the following slides - key achievements

Contract Risk Analysis

Analysis of the risks associated with a product on a particular contract and the supplier's capability to control that risk.

Compares the product risk against the supplier risk and estimates the supplier's capability to manage the identified risks

Plans to customise PBAM for our risk methodology two ways

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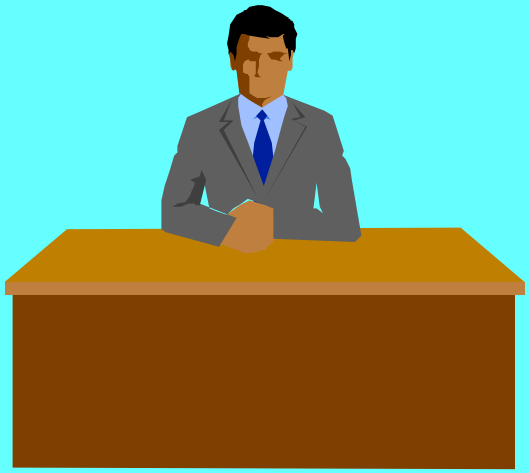
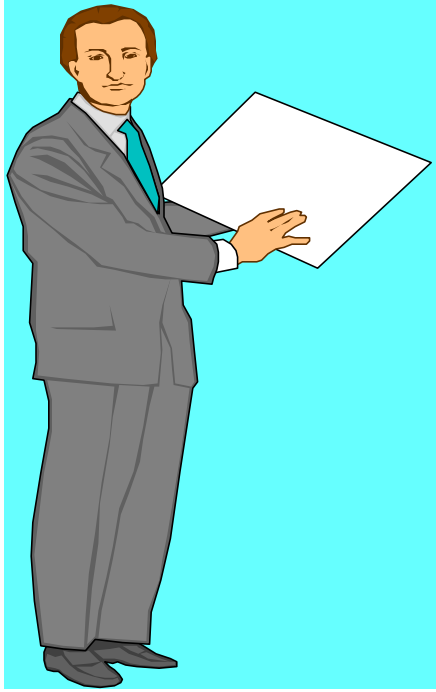
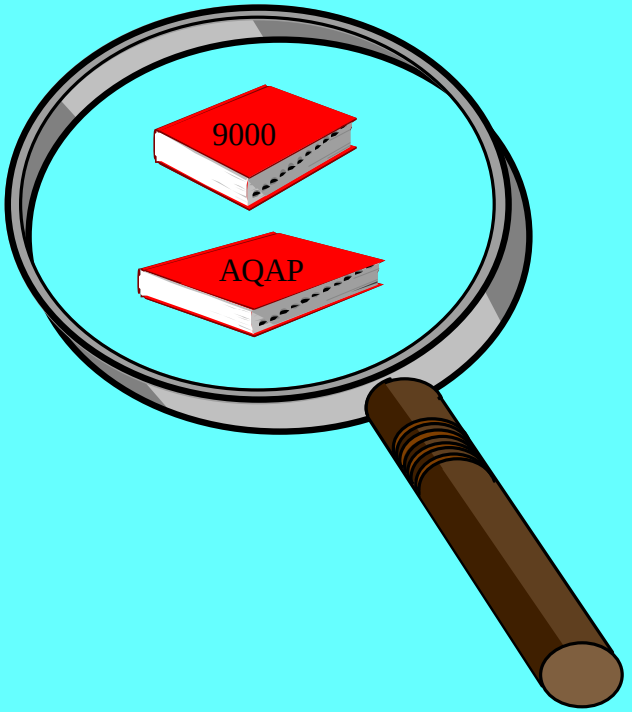
THE PROJECT MANAGER IS RESPONSIBLE FOR TASKING THE QAR (THROUGH THE PROJECT QUALITY EXPERT)





NO RISK BASED TASK
NO QAR SURVEILLANCE



Importance of QA Plan

Document setting out the specific quality practices, resources and sequence of activities relevant to a product, project or contract

Provides the QAR with initial indication of any risk area(s)

We are providing training to industry and the achievement is: awareness of industry about importance of quality planning

This is the second stage of our concept aiming to organise and implement quality assurance system in accordance with the program presented.

This would cover life cycle phases concept , development and production.

Mission:

establish legal bases for the system

establish internal communication

formally document the system

prepare quality personnel to perform this task

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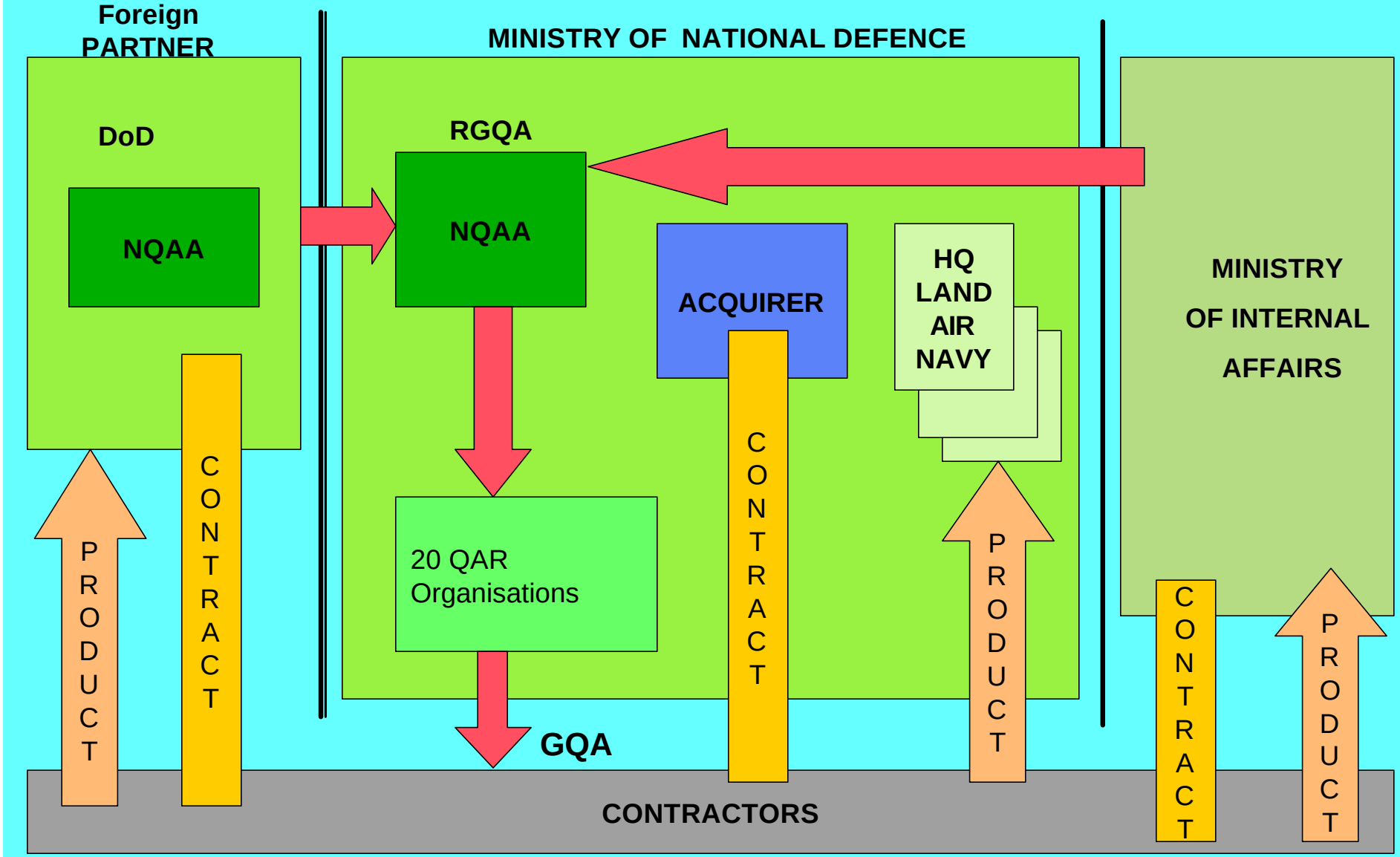
The concept of operation in Poland



Work have been done up to now:

- **The concept of QA Program developed and approved by our Secretary of State**
- **Registration by the Polish Centre for Testing and Certification**
- **Training of quality personnel** **(be presented - one of the following viewgraphs)**

Importance of contacts with DCMDI (criteria for reviewing QA practices of another gv`t for the purpose of establishing reciprocal QA agreement, meetings in Prague and in Warsaw

- **Organised team of experts who are tasked to document the QA system at the level of MoD and in the field as well**
- **Adoption of PBAM for Polish users** **(in progress)**

Achievement - we have changed the way of thinking of ourselves and major contractors. We are working simultaneously in the two stages.

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Documentation development

- **AQAP - All publications translated**
- **DCMC Developed Criteria for reviewing QA practices - translated** (Importance of contacts with DCMDI)
- **National GQA Procedures** (now under development)
- **Polish National QA Program based on AQAPs developed and approved**
- **Polish Version PBAM**
- **National Risk Management HANDBOOK envisaged to be developed the year 2001**

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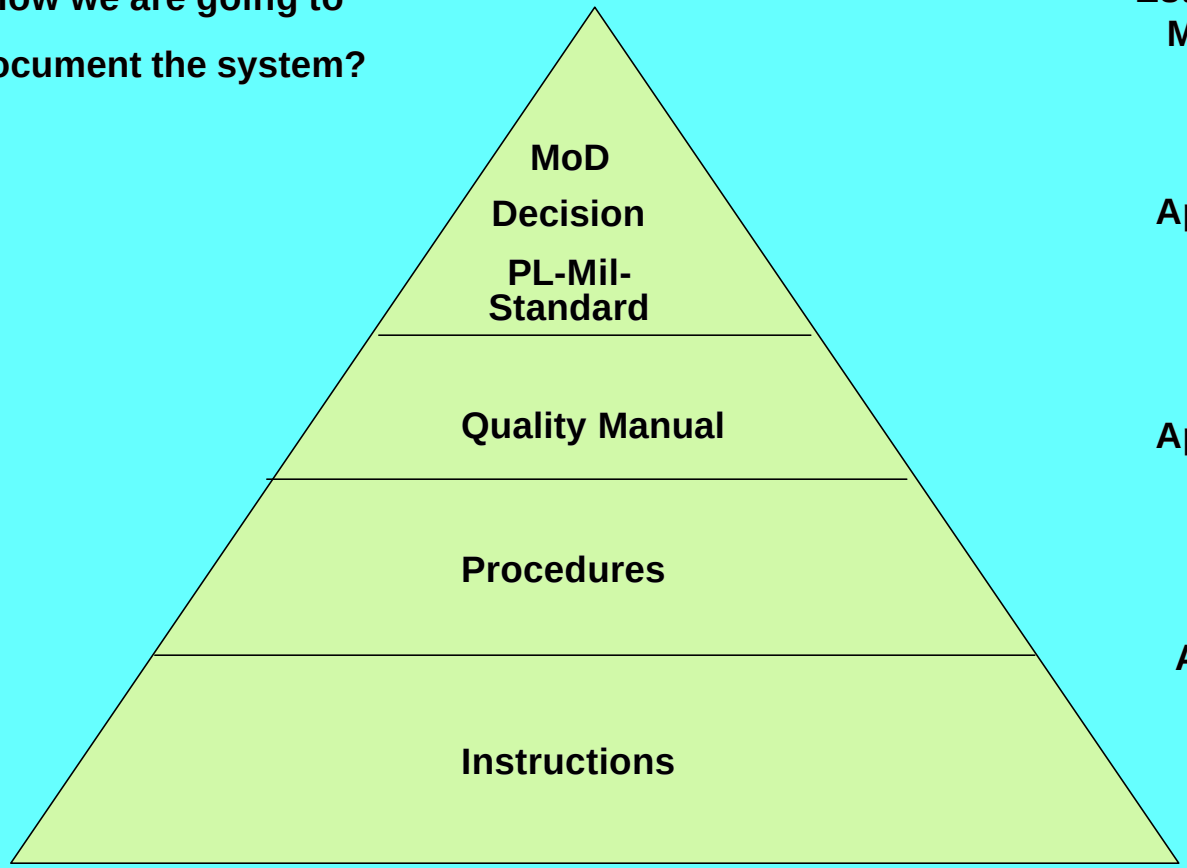
How we are going to document the system?



Establishes legal base for GQA MoD or higher (others dep.)

Approved by Undersecretary

Approved by Undersecretary and some by Director of BWSN.

Approved by the Heads of GQA Agencies

Lists of procedures

- **Development and control of QS procedures**
- **Organization and planning of GQA process**
- **Evaluation of contractor`s quality system**
- **Corrective and preventive action**
- **Surveillance of contracts**
- **Evaluation of subcontractor`s**
- **Decision making process to start GQA**
- **Identification of inspection and test status**
- **Final acceptance and completion of GQA**
- **Communications**
- **Methodology of risk management**
- **Handling of GFE**
- **Deviation permit and waiver**
- **Incorporation of quality requirements in the contracts**
- **Surveillance of research and development phase of internal contracts**
- **Designation of QAR to contract and QARs training**

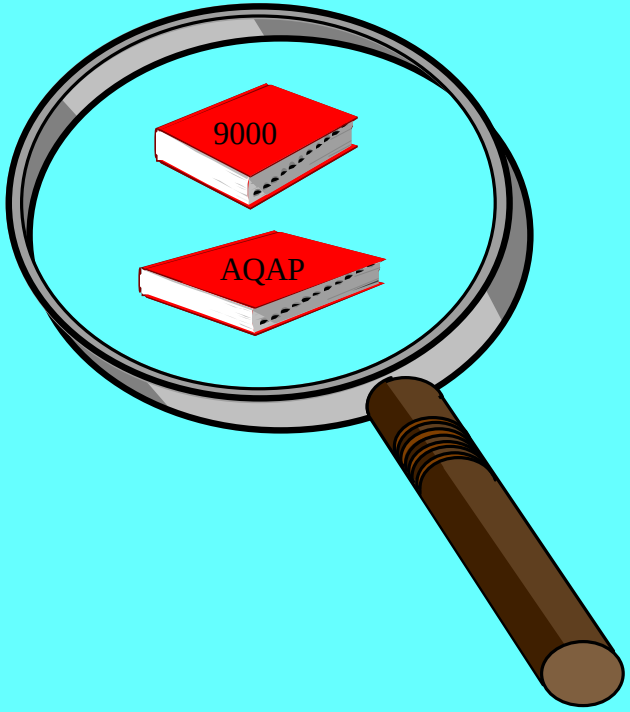
Instructions

Take into consideration diversities of defense products and processes

This are only procedures referring to GQA

Having the second stage completed or advanced in progress we are going to start the third stage based on NATO concept "integrated systems approach to quality through the life cycle of weapon systems".

Concept is based on AQAP 100 edition 3.
This would cower full life cycle.



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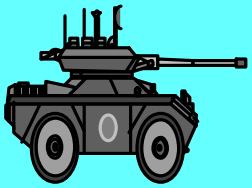
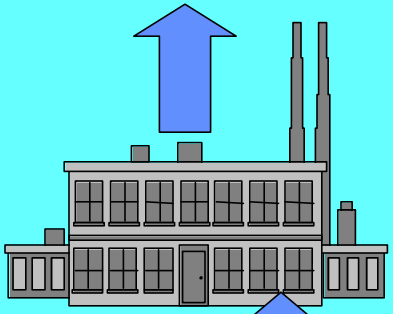
MOD
SECRETARY OF STATE

POLICY
BUDGET
REGULATIONS, LAWS

QM





GQA

NQAA

ACQUIRER
(key player)

PM

QAR
organisations

USERS
ARMY, AIRFORCE,
NAVY

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Training System

HOME

- ✓ Post-graduated course based on Military Technology Academy
- ✓ Two weeks course for QA specialists (LCQMs and QARs)
- ✓ One - two day training provided to industry people

Commercial companies

ABROAD

- ✓ Training offered by NATO AC 250, and QA Forum
- ✓ Training offered by DCMDI (MoU meetings) and CAS Conference
- ✓ A few -day bilateral specialists visits

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Trained manpower

1000 industry

August 1996	April 1997	September 1998	October 1999	March 2000	December 2001
2 mil	2 mil 1 civ	3 mil 3 civ	23 mil 3 civ	46 mil 8 civ	87 mil 13 civ
2	3	6	26	54	100

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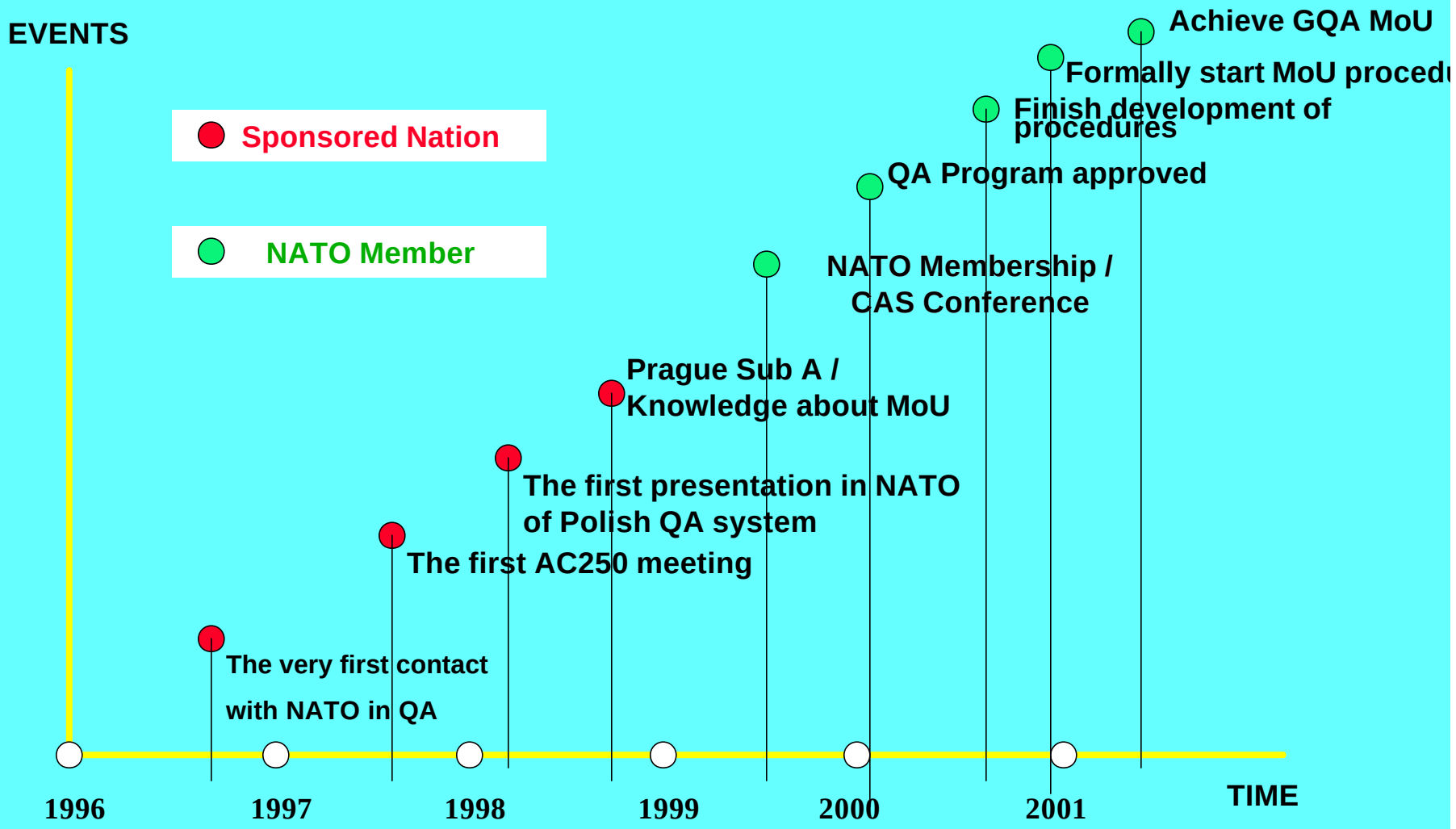
Step - by -step progress



QUALITY ASSURANCE PROGRAM

Plans for future

- formal initiation of the US procedure to achieve reciprocal GQA MoU - our intention is not to start from zero - plan fall this year;
- continuos training of QAR (part of the first stage);
- active participation in AC / 250 activities, its Subgroups;
- ratification and implementation of Stanag 4107 (finish of the second stage);
- sign reciprocal GQA MoU
- continuos improvement QA system aiming at implementation QMS which takes as a baseline integrated systems approach to quality through life cycle.

THANK YOU FOR YOUR ATTENTION